

PROCEEDINGS

OF THE


MEETING OF STOCKHOLDERS

OF THE

Wilmington, Charlotte & Rutherford

RAIL ROAD COMPANY,

AT WILMINGTON, N. C., OCTOBER 14th, 1858.



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PROCEEDINGS.

The regular Annual Meeting of the Stockholders of the Wilmington, Charlotte and Rutherford Rail Road Company was held at Wilmington, N. C., on Thursday, the 14th day of October, A. D. 1858.

At 10 o'clock, A. M., on motion of R. H. Cowan, Esq., Gen. Alfred Dockery, of Richmond County, was called to the Chair, and Messrs. A. S. Miller, of Bladen, and T. T. Slade, of Lincoln, were appointed Secretaries.

The Chairman, according to By-law 3d, appointed Major S. W. Cole, of Anson, and Col. T. D. Meares, of Brunswick, the Committee to verify proxies, and ascertain and report the names and number of Stockholders present, in person and by proxy, and the number of shares represented by them in this meeting. Recess for an hour.

The Chair being resumed, the said Committee reported, "That there were represented by proxy 14,192 shares.
" in person 1,151

Total present 15,343

and that the same constitute a majority, as appears from the Stock Book, and that a quorum is present."

On motion, said Report is concurred in and adopted; and it is thereupon announced by the Chair, that the meeting is duly qualified and ready to proceed with business.

The President then offered and read the Annual Report of the Board of Directors, accompanied by that of the Chief Engineer, and on motion, the same were referred to Col. John McRae, H. H. Robinson, and W. Russ.

The meeting took a recess until half past two o'clock.

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2 1-2 o'clock, p. m.

The meeting came to order upon a call from the Chair.

On motion of R. H. Cowan, Esq., it is

Resolved, That a Committee of three be appointed to digest and recommend to the President and Directors a plan by which the sum of from \$50,000 to 75,000 may be raised, from time to time, as the necessities of the Company may require, without sacrificing our present assets, with the express understanding that any debt that may be incurred for this purpose, shall be cancelled so soon as the Bonds of the Company, hereafter to be endorsed by the State, upon the completion of the first section of 25 miles, shall be realized by a sale thereof.

Committee.—Col. John McRae, R. H. Cowan, and T. D. Meares—and on motion the Chairman is added thereto.

On motion, the meeting then proceeded to ballot for thirteen Directors for the ensuing year—a recess of fifteen minutes being allowed for consultation. Messrs. Joseph A. Parker, Neill Kelly, and T. T. Slade, being appointed the Committee to superintend the same.

After the ballot, said Committee Reports, that the following named gentlemen had each received 14,908 votes, and that the same was a majority of the stock present :

Messrs. H. W. Guion, of Lincoln.
 A. H. VanBokkelen, of New Hanover.
 R. H. Cowan, do.
 T. D. Meares, of Brunswick.
 John A. McDowell, of Bladen.
 R. S. French, of Robeson.
 W. L. Steele, of Richmond.
 S. W. Cole, of Anson.
 D. A. Covington, of Union.
 John Walker, of Mecklenburg.
 C. C. Henderson, of Lincoln.
 G. Dickson, of Cleaveland.
 A. G. Logan, of Rutherford.

On motion of T. D. Meares, it is

Resolved, That the Treasurer of the Company be and he is hereby directed to report in full the financial condition of the Company—setting forth a statement of the amount of stock subscribed ; the amount collected and expended ; the amount paid to Contractors in cash or stock ; the amount due from delinquent Stockholders ; the number of employees in the service of the

Company, and their salaries, and all other matters connected with the financial condition of the Company; and that said Report be made to the Directors in time, if possible, that the same, or so much thereof as may be necessary, to exhibit fully the financial condition of the Company, may be published with the proceedings of this meeting.

The Committee to whom was referred the Report of the President and Directors, begged leave to make the following

REPORT.—That they had considered the same as fully as the brief time allowed them would admit, and they cordially recommend the same to the approval and adoption of the Stockholders; and congratulate the Company on the fidelity with which its interests have been managed.” Said Report was concurred in.

On motion, it is

Resolved, That the Board of Directors have their Report, together with that of the Engineer, printed in such form and to such extent as they may deem advisable.

The Committee of three, to whom was referred the resolution of R. H. Cowan, submitted their

REPORT.—That they had considered the same as fully as could be expected in the brief period allowed them, and that the result of their conference was embodied in the following Resolution, which they recommended to the adoption of the meeting:

Resolved, That the President and Directors be authorized to borrow the sum necessary to meet the demands to become due upon the Company as they may, from time to time arise, until the completion of the first section of 25 miles, either in New York or elsewhere; and that they be empowered to pledge as security for the payment of such sum or sums as they may borrow, the real estate which the Company now owns in the town of Wilmington—\$60,000 of the Bonds of the Town of Wilmington now in possession—and \$50,000 of the same Bonds which will come into their possession on the 1st day of February next, and such other securities in their possession as they can make available. *Provided*, That the sum borrowed, shall not in amount exceed \$100,000, and that they be required to pay the debt so incurred, so soon as the Bonds of the Company, to be hereafter endorsed by the State, can be made available. Which said Report and Resolution, on motion, is unanimously adopted.

On motion of Capt. John Walker, it is.

Resolved, That the next regular Annual Meeting of this Company shall be held in the town of Charlotte on the second Thursday in October, 1859.

On motion of Major S. W. Cole, it is

Resolved, That in case the Board of Directors may deem it necessary, to call a special meeting of the Stockholders, that the same shall be held at the town of Rockingham, in the county of Richmond.

Dr. Neill McNair then offered the following Resolution :

Resolved, That the courtesy and ability with which Gen. Dockery has presided over our deliberations, demand our best acknowledgments, and the same are hereby tendered to him"—and the same being put by the author, was unanimously adopted.

On motion of Mr. Cowan, it is unanimously

Resolved, That the ready and efficient manner in which Messrs. Miller and Slade have severally discharged their duties, as our Secretaries of this meeting, deserve our thanks, and the same are tendered to them.

On motion,

The meeting is pronounced by the Chair adjourned, *sine die*.

A. DOCKERY, *Chairman*.

A. S. MILLER, }
T. T. SLADE, } *Secretaries*.

REPORT
OF THE
PRESIDENT AND DIRECTORS
TO THE
STOCKHOLDERS
OF THE

Wilmington, Charlotte & Rutherford Rail Road Company,
Assembled in their regular Annual Meeting, at Wilmington, N. C., on
Thursday, the fourteenth day of October, 1858.

At the first meeting of the Company, as true policy dictated, the design was conceived, and the attempt was made, to secure such a hearty co-operation of all the counties on the line from Wilmington to Rutherfordton, as would, at once, place the whole work under contract from one end to the other. This course, it was foreseen, would secure the completion, not only of the roadway, but the entire work at the earliest day—gratifying the patriotic desires of our Stockholders, and enhancing to them their several investments in our common enterprise. Jealousies and apprehensions, however, interposed to prevent the accomplishment of this first desirable hope; and at a meeting of the Stockholders held in Wilmington on the 18th of June, 1856, it was reluctantly determined to alter our first plan, and instead thereof to build the road in separate sections. The first section to extend from Wilmington to the West bank of the Cape Fear River, at or near Walker's Ferry; the second from the West bank of the Cape Fear to the Pee Dee River; the third from the Pee Dee to the town of Charlotte; and the remaining portion, to constitute, as indicated in our charter, an independent section, and be designated the Western Division of the road. It was also then determined that the first section from Wilmington to the West bank of the Cape Fear River, if necessary, for the want of means, should remain untouched until the completion of the work to Charlotte.

After the adoption of the June resolutions, the work was generally placed under contract *with our Stockholders* through the counties of Bladen, Robeson and Richmond, with the stipulation that the same should be completed by the first day of January, 1859. In the county of Brunswick, having but few Stockholders, and these unwilling to divert their labor from their profitable connections with the Cape Fear River and its commerce, we were unable to let this portion of the work, to those deeply interested in its progress, as the rest had been. Yet as they and many others on the line had subscribed to the Capital Stock of the Company, with the understanding that they should be allowed the privilege of discharging such subscriptions in labor or materials, a certain day was fixed, and general notice given, by which time they were to be allowed the preference in the remaining contracts, and all not closing with these terms, were to be deemed and taken as preferring to pay their subscriptions in money. As but few came forward, it was determined, as our only course, to advertise publicly for contractors, and open the work to bidders in the fall of 1858. In the counties of Richmond, Robeson and Bladen, notwithstanding the scarcity and very high prices of labor and provisions, our contracting Stockholders came forward in 1857, and earnestly entering upon their several sections, labored with such zeal and vigor as gave a sure demonstration of the ultimate success of the work. The Autumn of the year bore unmistakeable testimony to the fact, that a Railway was in the course of rapid construction through those counties.

Such was the condition of things at the last annual meeting of the Stockholders, and the hope was then confidently entertained that the remaining sections, especially those in Brunswick, could be immediately put under contract, and their completion secured by the 1st of January, 1859. Advertisement was accordingly made for contractors, not only for the graduation, but for the necessary timber for the trestle work to be erected through two large swamps, the Brown Marsh, in Bladen, and the Great Swamp in Robeson. Before the arrival of the day, however, for opening the bids, a sudden and unexpected convulsion in the

monetary affairs of the whole country occurred, that seemed to threaten us with an entire overthrow. Relying chiefly upon the Bonds of the Town of Wilmington for the construction of this portion of the work, their negotiation, before felt to be difficult, we now deemed next to impossible. Much and great hesitation was felt as to letting to contract at all under the circumstances, and yet a refusal to do so would certainly prove most disastrous to the Company. A suspension of the work on the eastern terminus, would certainly be followed in the counties above, and *if ever*, it might, most probably would be long, very long, before our contractors through Bladen, Robeson and Richmond, could be so unanimously inspired with zeal and confidence as to return to their sections and resume their labors with that earnestness they were then manifesting. To them a cessation of the work would involve the loss of thousands, that would long be keenly felt and harshly remembered. With such a shipwreck of our hopes impending, there seemed to be but one course to pursue, and that was to let only a portion of the work to contract, and resolutely to meet financial difficulties as they might arise. Except the first section near the Cape Fear River; the graduation, was let through Brunswick, and a few unlet sections in Bladen, as far as the Robeson county line. The graduation of the unlet sections in the counties above, the heavy trestle work, the bridges and wharfing on the River, were reserved for another time. To meet our contracts we at once procured the services of an active and influential friend, as an agent to assist us in disposing of our Town Bonds, and although he immediately and earnestly entered upon the duties assumed by him, our first quarter expired before the negotiation of them could be effected; and such was the stringency of the money market, that there was but little reason to hope for any early disposition of them, without submitting to a sacrifice really ruinous. The Board then applied to several Banks for loans of sufficient amount, and for a length of time that would sustain us during the progress of the work and enable us to await a more propitious season for converting our Bonds into Cash. Only one of the number applied to, however, would render us the aid desired,

and this was only sufficient to sustain us for a single quarter. In July we negotiated the sale of twenty thousand dollars of our Bonds at par, and this sum has enabled us to discharge our Bank debt and meet our payment to contractors to the present time. The next Board of Directors must therefore endeavor to procure relief, by adopting some of the expedients generally resorted to by Rail Road Companies; and it is to be hoped that they will not find it difficult, as the assets and means of the Company are more than adequate to the cost of the work, provided they can be made available.

Notwithstanding the difficulties we have had to contend with in a variety of forms, and in many places, we are enabled to report, that if our designs are not marred, we shall be ready to commence with the superstructure of the road by the first of April next, and that such is the state of the work upon the line, when once commenced, the laying of the track will be steadily continued until we reach Rockingham, in the county of Richmond, only 4 1-2 miles east of the Pee Dee River. The timber for the trestle work over Brown Marsh is contracted for, and the sills will chiefly be furnished by our Stockholders. Those for the first few miles are now ready, and their delivery will commence in a short time.

On the score of economy, it is recommended that the Company itself, with a hired force, shall not only lay the track, and erect the necessary wharfing on the River, but also construct all the trestle work of an important character. To accomplish this end the necessary means must be prepared; locomotives and trains must be purchased, steampile-drivers procured, clothing, implements and provisions furnished, and the hands be provided for, before the first section of twenty-five miles can be completed. When that is done, the Company may issue its Bonds with the State's endorsement for \$200,000 and reimburse the expenses thus incurred in advance of the fund to be derived from that source. Unfortunately for us, the assets we now have on hand, appropriated to this part of the work, were designed for our domestic market, and this in the hour of our need we find in a crippled and depressed condition. Abroad, it is to be

hoped, we shall find the aid we expected to receive at home. Commencing the track in April, the first section of twenty-five miles will be finished in July, or early in August, and each succeeding section in periods of equal length. Upon the completion of each, the State will endorse the Bonds of the Company for the sum of \$200,000; and as they can be drawn to suit any market, it is believed that the fund to be realized from them, will relieve the next Board of Directors from much of the embarrassment experienced by the present.

A very eligible site on the West bank of Cape Fear River, a little below the "Mount Misery" or "Walker's Ferry," has been purchased from Major John Walker, with the right of way and user over a portion of his rice fields contiguous to our purchase, affording us every desirable facility and advantage for our temporary terminus. With a friendly disposition towards the company, the proprietor made his terms such as not to impair our present strength or impede our future progress. This site was selected as being at or near the point where the ultimate crossing of the River must be effected to connect the temporary terminus with the town.

In April last the proprietors of that extensive and valuable piece of property in the town of Wilmington known as "the Gaston Mills Property," offered the same to the Company, upon such terms as demanded the consideration of the Board. After duly weighing the matter, it was determined to make the purchase at once, and secure for the Company, in advance of its immediate necessities, a very extended water front, and contiguous territory, which it will need and use at an early day; and which hereafter may be adopted as the permanent wharf and depot site, provided another more eligibly situated may not be procured in exchange for this, or obtained upon terms consistent with the means of the Company. The larger part of the price of the property is to be discharged in the Bonds of the town, to be issued to us in the year 1860.

THE THIRD SECTION.—Although necessity drove us to the building of the road in sections, yet the great importance of connecting the two divisions and completing the entire work,

with as little delay as possible, was too manifest to escape the attention of the Directors. To promote this object, they caused surveys to be made last fall, and received the Engineer's Report early in the present year. The line as adopted, though not as favorable as could be desired, is yet decidedly better than was anticipated from the prior experimental surveys. To reach the Pee Dee from Rockingham, we are compelled to pursue the valley of Hitchcock's creek, a very costly line, but the only practicable one that can be obtained. Through the county of Anson, for a few miles, departing from the original surveys, a very decided improvement has been made; and yet the new line has given great dissatisfaction to some of the citizens of that county. It is not generally known, however, that the line of the first experimental survey, running on the South side of Wadesborough, was so objectionable in feature, and so expensive, as almost to preclude even the hope of its construction; the cost of preparing the roadbed alone exceeding \$300,000 in amount. The present line, as located on the North side of the town, possesses every advantage, being shorter, requiring less curvature, affording lighter grades, cheaper bridges, and costing \$106,000 less than the other. With these advantages in favor of the northern line, and its cost placing it within the limit of practicability, the Board could not, in justice to the Company, or to the County of Anson itself, do otherwise than adopt the northern line. It is true that it does not approach the town as closely as could be desired, yet that is comparatively a slight disadvantage, and one which may be remedied in the course of construction. Through Union the line is remarkably good, and will be a cheap one, if the slate which underlies the soil shall not interfere too much with our graduation. Our Engineers have endeavored to avoid this danger as much as possible. In Mecklenburg the country is rough and the line expensive, though there are but few miles of it. The location of the depot, in the town of Charlotte, gave rise to some feeling among the citizens, and as it was a question of deep importance, it received the fullest consideration of the Board. After mature deliberation of the matter, in all its various bearings, it was determined that the

interests of this Company require us to connect with the North Carolina Rail Road in the Northern part of the town, in preference to connecting with the Charlotte and South Carolina Rail Road at the Southern extremity.

Were it not for the Bridges on this third section, and also on the Western Division of the Road, we should feel relieved from the chief embarrassment usually experienced in the construction of Rail Roads. Our citizens do, and will readily come forward with their means and energies to procure to themselves the advantages of a Railway, and we may safely rely upon them for the graduation, cross-ties and such other portions of the work as they are competent to do. But masonry and bridging are but imperfectly understood with us, and mechanics and architects procured from a distance to do such work, demand all cash, high prices and prompt payment. This part of the work should keep an even pace with or rather in advance of the graduation; and to graduate, get the sills, erect the warehouses and other structures, and at the same time furnish the means of constructing the bridges, is a burden quite too heavy for our richest communities.

From Rockingham to our Western terminus, we have many streams to cross, requiring heavy and permanent masonry, with costly superstructures, and it is this portion of the work that weighs heavily upon us in our desire to progress.

Should we not again appeal to the Legislature for "material aid," or aid in a form more serviceable than at present proposed? From our State, that has dealt so liberally with other public improvements, even with small creeks and rivers, plank roads and turnpikes, we ought surely to hope that her fostering care will not be parsimoniously withheld from ours, the most truly State work ever projected within her borders.

The citizens along the line of this section, with very few exceptions, have generously released to the Company the right of way through their lands.

Although we have had ready for some time the necessary maps, plans, profiles, and estimates, on this section, no attempt has been made to place any portion of it under contract. We deemed it highly improbable that any work would be com-

menced before the winter season, even if let at the earliest period; but the chief cause of postponement has been the non-delivery to us of the County Bonds, where we have agreed to take them, and the immature state of the County arrangements to meet their subscriptions. It is all important that the Board shall fully know what they have to rely upon, before binding the Company in contracts for the performance of work. As the counties have procured their Bonds, and are now nearly ready with them, it is believed that this third section, or a large part of it, can and will be offered to contractors this fall, and as short a period as possible, be allowed for its completion.

THE WESTERN DIVISION.—A large portion of this division has been under contract for nearly two years; and though our contractors have had many difficulties to contend with, their progress has been of the most satisfactory kind. The line from Charlotte to Lincolnton, a few sections excepted, is nearly ready for the superstructure; and all the heavy sections between Lincolnton and Shelby, and Shelby and Rutherfordton, are in the hands of energetic and earnest contractors, in the course of construction. The masonry for the bridges between Charlotte and Shelby, has been let chiefly to our Stockholders. For a few sections in Mecklenburg, we have, as yet, found no contractors, and it is possible that the Company may be driven to the necessity of hiring a proper force, and accompanying outfit, and do the work itself, finishing all the unlet sections between Charlotte and Rutherfordton. It will be autumn before the road-bed will be sufficiently finished to authorize the laying of the track. We are seriously retarded in our progress for the want of cash means to enable us to regulate our contracts according to our wishes, and for the most economical construction of the road.

The County of Mecklenburg has made her first issue of county Bonds, and made every arrangement for meeting her interest. Rutherford voted so late in the season to make her subscription, that an assessment of taxes could not legally be made, and hence her bonds are not yet issued. Cleaveland laid her taxes, but at a subsequent term rescinded the order, so that her bonds cannot be used until the next summer. This is much to be regretted,

as it will delay our operations on the 2nd section, and defeat our plan for the continuous completion of the road to Shelby.

Early in the summer the citizens of the upper counties raised among themselves voluntary contributions for procuring a survey across the Blue Ridge, at the Hickory Nut and Reedy Patch Gaps. These contributions were tendered to the Board of Directors, with the request that under its direction they should be expended in accomplishing their object. Authority was given to the Chief Engineer to take charge of the survey, and to detail so many of his assistants, and to use so many of the instruments, tents, &c., as could be spared for the occasion without serious inquiry to the Company's interests. Mr. Fleming Gardner, who has charge of our Western Division, a gentleman of intelligence, high moral worth, well skilled in his profession, and deservedly enjoying the confidence of all who know him, was placed at the head of the corps detailed for this survey. His report, appended to that of our Chief Engineer, is worthy of the best attention of every patriotic citizen of the old North State. By it stands revealed the gratifying *fact*, that here amidst the grandest sublimesties of the omnipotent creator, as manifested upon this continent, may man place in feeble contrast, *his* greatest and proudest invention for the amelioration of his race; and that too, with such ease, and at a cost so moderate, as to excite not only our astonishment, but almost to defy credulity itself. The advantages here tendered by nature may not be appreciated by the present generation; but we feel assured that the day will, and must come, when this mountain pass will be gladly seized upon and be made the highway of communication between the East and the West. As our work is to endure through all time, it behooves us *now* so to *begin* it, that hereafter it may be economically continued, and systematically perfected, and in the end bear ample testimony to the future, that our febleness, not our blindness, stayed our steps in this path of "manifest destiny."

By order of the Board.

H. W. GUION, *President.*

ENGINEERS OFFICE, WIL. CHAR. AND RUTH. R. R. }
 Wilmington, N. C., Oct. 12th 1858. }

H. W. GUION, ESQ.,

President W. C. & R. R. Co.

SIR:—I beg to submit the following report of the operations of the department under my charge, since the date of the former report in 1856.

LOCATION OF THE LINE.

At the date of the last report, a party in charge of Mr. Roger P. Atkinson, and the only party then in the service of the Company, was engaged in running out below Lumberton, and in the direction of the Cape Fear River, the long tangent, which at the time, we expected to continue unbroken to the river, or near there: But on approaching Livingston Creek, in Brunswick County, it was found that the line intersecting the Creek at a bend, would follow down it for some distance; to avoid this, no other choice was then left, but to put in a curve. From the end of this curve we continued the line straight to a point near the river, crossing Livingston Creek immediately below the county bridge.

This portion of the location was completed, with the exception of the connection with the river, in December 1856, and the party disbanded. Nothing farther was done with the location until September 1857, when a party was again organised under the direction of Mr. Atkinson, for the location of the remaining portion of the line between the Pee Dee river and Charlotte.

In starting this, an unsuccessful effort was made to relieve the line of the expensive and objectionable part down the valley of Hitchcocks Creek, from Rockingham to the Pee Dee river. Failing to effect this change, the line was carried across the Pee Dee at the upper end of Deberry's Island, above the mouths of Hitchcock's creek on the east, and of Island creek on the west; from the crossing of the river the line ascended the valley of Island creek to the ridge near Lilesville, in Anson county. Here a difficulty presented itself—to get a line through the county of Anson that would be consistent with the interests of the Company and give satisfaction to the citizens of the county and the town of Wadesboro. Our first experimental line, run in the spring of 1856, from Lilesville, followed very nearly the main

road to Wadesboro, keeping generally South of it; passing Wadesboro' on the south, it was carried near the Academy, through a depression in the ridge on which Wadesboro' is situated, and thence, generally on the south side of the main road to Monroe, to the crossing of Goold's Fork and Big Brown Creek; the former south of the County bridge, and the latter below the mouth of Little Brown Creek. On this line grades of 60 feet to the mile were required to cross both Reedy Branch and Goold's Fork, and in the descent to, and crossing of both these streams, heavy excavations and embankments were encountered. Before locating upon this line, farther examinations were made, which resulted in our finding a line north of the main road, which crossed Reedy branch nearer its head, the ridge at Wadesboro', north of Carr's Mount, (about three-fourths of a mile from the Court House,) and from thence, still keeping north of the road, crossed Goold's Fork below the County bridge, and Big Brown Creek, near the same point as on the first experimental line. A comparison of the two lines, showed so decided an advantage in favor of the latter, in alignment, grades, length, and cost, that I could not hesitate to adopt it, even in advance of the action of the Board of Directors—the only objectionable feature being its distance from Wadesboro'.

From the crossing of Big Brown Creek, the line to Monroe, and thence to Charlotte, is very direct, passing Monroe on the north, and connecting on the northern side of the town of Charlotte, with the located line of the western division. This connection was effected in December 1857, and the parties disbanded. Subsequent to this, the Board having decided upon the location for the temporary terminus on the Cape Fear river, a connection was made with it and the line from Lumberton; thus completing the location of our whole line of road, with the exception of that part from the temporary terminus into the town of Wilmington.

The temporary terminus is five miles above the town, on the lands of Maj. John Walker, and adjoining those of Mr. Junius Davis, at which point a sufficient amount of river front has been obtained to meet the future wants of the Company; and

as the terminus is at the point at which it is designed to cross the river, when the road is extended into town, the improvements made there may be so arranged as always to be valuable to the Company.

CHARACTERISTICS OF LINE.

The length of the whole line from the Cape Fear River to Rutherfordton, is 263.99 miles, viz: Eastern Division, from the Cape Fear to Charlotte 182.91 miles, and Western Division, from Charlotte to Rutherfordton 81.08 miles.

Upon the Eastern Division, there are 165.24 miles of straight line, and 17.67 miles of curved line. The longest tangent, or straight line, is 78,89 miles in length; this is connected with another of 16.72 miles by a curve so slight as to make the change of direction scarcely perceptible. On the 17.67 miles of curved line, there is an aggregate of 1,814 degrees and 34 minutes of curvature, being an average, on the whole division, of 9 degrees and 55 minutes to the mile. The shortest radius used is 1,432½ feet; with this radius, there are six curves, deflecting 296 degrees and with an aggregate length of 7,400 feet. The longest radius used is in the curve connecting the two tangents before referred to; its length is 17,189 feet, and the deflection but 2 degrees and 20 minutes.

The grades from the Cape Fear river, for a distance of 85,11 miles, are light, the maximum being but 20 feet to the mile; above this they increase to 53 feet to the mile, the maximum to Charlotte. Of trestle work, there will be 15,400 feet; the longest at Big Swamp, 7,000 feet in length, and at Brown Marsh Swamp, 4,000 feet. Of trussed bridges, there will be twenty, with spans, varying in length from 60 to 160 feet; this latter span will be used at the crossing of the Pee Dee river, where 10 spans will be required.

Upon the Western Division, there are 51.91 miles of straight line, and 27.17 miles of curved line. The total deflection of the curved line is 3698 degrees, being an average on the whole division of 45 degrees and 36 minutes to the mile. The shortest radius used is 1910 feet; with this radius, there are 65 curves, deflecting 2562 degrees and 13 minutes, and with an aggregate

length of 1617 miles ; the longest radius is 5,730 feet in length ; with this radius there are 15 curves, deflecting 233 degrees and 30 minutes, and with an aggregate length of 4.42 miles.

The maximum grade between Charlotte and Lincolnton is 58 feet to the mile, and between Lincolnton and Rutherfordton 63 feet to the mile ; these grades are frequently used, and necessarily so from the broken character of the country, intersected as it is by numerous streams, all of them having deep vallies.

Of trussed bridges, there will be 9 with spans varying in length from 100 to 150 feet, and with an aggregate length of 2710 feet, the longest across the Catawba river which will be 500 feet in length.

PROGRESS OF THE WORK.

The Eastern Division, for convenience, has been subdivided into three divisions. One from Lumberton to the Cape Fear river, distance, 62.46 miles ; one from the same point to the Pee Dee river 54.73 miles, and the other from the Pee Dee river to Charlotte, distance 65.72 miles.

From Lumberton to the Cape Fear river has been divided into 62 sections, having an aggregate of 1,026,325 cubic yards of excavation and embankment ; 50 of these sections, with an aggregate of 897,881 cubic yards, have been contracted for, leaving 12 sections, with an aggregate of 128,444 cubic yards, to be provided for—with two exceptions, the contracts for the 50 sections require that they shall be completed by the first of January 1859, very few, however, will be completed then ; the failure on the lower end of the line will be attributable in some measure to the heavy rains which fell in that particular sections only, during the month of August. Three or four of the sections will probably have to be re-let, as the contractors for them either have not commenced, or have progressed so slowly as to forbid all hope of their getting through in time.

The line between Lumberton and the Pee Dee river has been divided into 65 sections with an aggregate of 1,743,905 cubic yards of excavation and embankment. 44 of these sections with an aggregate of 811,312 cubic yards have been contracted for, leaving 21 sections to be provided for, viz : 15 sections east of

Rockingham, with an aggregate of 470.404 yards, and 6 sections between Rockingham and the Pee Dee river with an aggregate of 462.188 cubic yards.

The contracts for the 44 sections on this part of the line are also required to be completed on the 1st of January 1859. Seven of the sections are already completed, and most of the others are in fair progress, and will be completed in good time.

No provision has yet been made for the construction of either of the bridges or of the trestle work, except some of the smaller trestle bridges, and the contracting for the timber for the trestle work across Brown Marsh swamp—but this will not delay us—if the means are provided, I can see nothing to prevent our commencing to lay track on or before the first of April next, and continue uninterruptedly to Rockingham. The cross-ties for nearly all of this distance have been contracted for, and will be delivered in ample time.

The Western Division has been divided into 66 sections with an aggregate of 4,029,300 cubic yards of excavation and embankment; of these, 30 sections with aggregate of 1,782,600 cubic yards, have been put under contract. 13 of them are between Charlotte and Lincolnton, with an aggregate of 698,700 yards, leaving between those points 10 sections yet to be contracted for with an aggregate of 605,700 cubic yards. Between Lincolnton and Shelby 9 of the sections have been contracted for, with an aggregate of 572,500 cubic yards, and 9 remain to be provided for, with an aggregate of 426,600 cubic yards—between Shelby and Rutherfordton, 8 sections have been contracted for, with an aggregate of 511,400 cubic yards, and 17 sections remain to be provided for, with an aggregate of 1,214,400 cubic yards.

All of the contracts for grading, with one or two exceptions, between Lincolnton and Rutherfordton, are in fair progress and will be completed by the stipulated time.

The masonry for the bridges across Long Creek and the Catawba river has been put under contract, and the work at each place is progressing in such manner as to insure the completion of both jobs in time. Sugar Creek culvert is also under con-

tract, and work upon it commenced and in fair progress. Contracts have also been entered into for the masonry of the bridges at the South Fork of the Catawba river, Buffalo creek and First Broad river, and for the culvert at Muddy Fork, but no work has yet been done at either place, except to furnish a part of the brick required at Muddy Fork.

The value of the work done on the Eastern Division to the 1st inst. amounts to 91,894 dollars ; and on the Western Division to 88,156 dollars, making an aggregate of 180,050 dollars on the two divisions ; to have done as much work during the period of embarrassment to which the whole country has been subjected, and with the small amount of means at our command, shows that the subscribers to the stock who have undertaken to work out their subscriptions, have taken hold with an earnestness that is worthy of all praise, and which ought to inspire all with confidence in the ultimate success of the work.

MOUNTAIN SURVEY.

The Survey of the Mountain, ordered by the Board of Directors at the meeting in Charlotte in June last, has been made. Mr. Gardner's report with the map, profile and estimates, are herewith submitted.

The amount appropriated for the expenses of the Survey, was so small, that nothing more than a hasty examination could be made ; enough, however, has been done to prove that it is practicable to cross the Mountains at the Reedy Patch Gap at a very moderate cost, without having to use *inclined plains*, or without having to resort to tunnelling, except in one instance for 350 feet ; and this, even, may be avoided without greatly increased cost.

Further and more careful Surveys, would, I am confident, demonstrate that the line from Rutherfordton to the top of the Mountain can be improved in all its essential elements. From the top of the Mountain, westward to the mouth of the Swanoa river, the point to which our examinations extended, a very favorable line can be obtained by following the valleys of Clear creek, Mud creek, and the French Broad river. A more direct line could probably be found ; but as it would necessarily have

to cross Cain creek and the range of Mountains between it and Clear creek, a much heavier expenditure for graduation would be incurred, together with the use of higher grades and curvature.

Very respectfully,

JOHN C McRAE.

Chief Eng. W. C. & R. R. R.

To J^NO. C. McRAE,

Chief Eng. W. C. & R. R. R.

SIR:—In compliance with your directions, having procured the services of Wm. McRae and James N. Turner as assistants, I started from Rutherfordton, on the 20th of July, to make an Instrumental examination of the country with a view to the extension of the W. C. & R. R. Road westward from that place.

Starting from a point on the ridge north of the village of Rutherfordton, where the present location terminates, a line was run, following the Asheville road until it reached the road branching off to Hendersonville, when it followed the latter to top of the Mountain at the head of Reedy Patch Creek, near the church. The elevation of this point above tide water, was found, by our level, as carried from the North Carolina road at Charlotte, to be 2243 feet.

From station 979, near the upper end of Mr. Harris' plantation, to station 1154, near the bridge across the road leading to Hendersonville, a distance of three miles and a quarter, the levels taken at the surface of water, showed a fall of 469 feet, or an average of 144.6 feet per mile.

From 1154, the rise to the top of the ridge, a distance by the road of 5.2 miles, was found to be 772 feet, or an average of 148.4 feet per mile.

Taking a cut of 53 feet at the summit of the ridge and a grade of 100 feet to the mile, the line was run down on the west side of the Reedy Patch Creek, crossing over the point of the ridge between the creek and the river, and turning round it upon a grade of 30 feet per mile, was carried back upon the same side of the creek to the foot of the Falls near Ambrose

Edney's, when again turning with a 10 degree curve, and upon a level grade it was carried down, generally upon the east side of the creek, crossing it three times in all, to the River; thus developing the distance from the top of the ridge to the river to 7.75 miles.

The last curve at Edney's might very easily have been made an 8 degree curve instead of 10 degrees; the one at the point of the ridge could also be made a 10 degree or an 8 degree curve instead of a 12 degree, as it was run in—but it would be at a very considerably increased cost, as the embankment necessary to sustain it would be 70 to 80 feet in height for some 700 feet.

After reaching the river, the line continued down it for about half a mile, crossing just where the most rapid Falls commence, at an elevation of 26 feet, and at a very favorable point. The solid rock rising upon either side some 10 or 12 feet above the present surface of the water, with a natural pier nearly midway of the bed of the stream. Continuing down upon the north side of the river, the grade brings it to the waters edge at a distance of 12.8 miles from the summit; from this point the river falls at the average rate of 27 feet to the mile, for three miles.

The line could be carried down upon the south side of the river without crossing it, for about 7 miles below the present crossing, with, I am satisfied, a less amount of earth work. But I think it would be preferable upon the north side, even at a greater increased cost; as upon that side the snow and ice, as I am informed, rarely ever lies more than a day or two, whilst upon the other or northern exposure it remains for weeks.

From the knowledge of the country, obtained during this survey, I think a line could be had with a grade of 80 feet per mile, without increasing the present estimate more than 50 per cent.; it would of course require some three miles and a half more distance to reach the level of the river. After reaching the river, I returned to the Gap and had a line run down upon the west side.

This line as run, affords no basis for any thing like an accurate estimate, as frequent attempts were made to leave the valley of the creeks; but the country proved too broken. A line could be found, but it would be much more expensive than the one following the creek, as this would be exceedingly light work. The average fall from the Gap to the mouth of the Swananoa

being only a fraction over 8 feet per mile; the distance would be considerably increased over the road-way. The whole distance from Rutherfordton to a point on the French Broad, opposite Asheville, would be about 60 miles; but I think, apart from the cost, policy would dictate the adoption of this line, as it would secure the trade of the county of Henderson, one of the richest, if not the very richest of the western counties. The grading and bridging of this 30 miles could not exceed \$6,500 per mile.

Not having time to revise the whole line back to Rutherfordton, I deemed it best to revise only that portion of it from Town to Mountain creek, and the estimates are based upon the road line for the 16 miles. That they could be greatly reduced by a more careful survey is beyond question.

Annexed you will find the amounts of Excavation, Embankment, Drains, &c.

In the mountain section I have considered all the excavation as rock; and whilst I am convinced a careful location would reduce the aggregate of earth work, I have added 20 per cent. for contingencies to the entire amount.

Most respectfully yours,

F. GARDNER,

Pr. Ass't. W. C. & R. R. R.

LINCOLNTON, August 28th 1858.

MOUNTAIN SECTION 12.8 MILES.

Excavation, 398.267 cubic yards,.....	\$199,133 50
Tunnelling, 350 linear feet,.....	16,000 00
Embankment, 797.816 cubic yards,.....	111,694 24
Drains. 7200 cubic yards,.....	18,000 00
4 Bridges completed,.....	50,000 00
	<hr/>
	394,827 74
Adding 20 per cent.	78,965 56
	<hr/>
	473,793 30

Average per mile \$37.015.

ROAD SECTION FROM RUTHERFORDTON TO FOOT OF MOUNTAIN 16 MILES.

Excavation,.....	\$ 91,200 00
Embankment,.....	132,480 00
Drains,.....	12,000 00
6 Bridges completed,.....	120,000 00
	<hr/>
	365,680 00
Adding 20 per cent.	71,136 00
	<hr/>
	\$426,816 00

Average per mile \$26,676.

